

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 Claim 1 (currently amended): For use in a router having a
2 designated routing facility and a standby routing facility,
3 a method for processing information related to routing, the
4 method comprising:

- 5 a) executing, with the designated routing facility, a
6 routing protocol to generate network topology
7 information;
8 b) providing a copy of ~~network topology information~~
9 ~~generated by, and/or~~ network state information
10 received by, the designated routing facility to the
11 standby routing facility; and
12 c) executing, with the standby routing facility, a
13 routing protocol based on the network information
14 provided by the designated routing facility, but such
15 that signaling from the standby routing facility to
16 external nodes is suppressed.

1 Claim 2 (original): The method of claim 1 wherein the
2 routing protocol is the IS-IS protocol.

1 Claim 3 (original): The method of claim 1 wherein the
2 routing protocol is a link state routing protocol.

1 Claim 4 (currently amended): For use in a router having a
2 designated routing facility and a standby routing facility,
3 a method for processing information related to routing, the
4 method comprising:

5 a) executing, with the designated routing facility, a
6 routing protocol to generate network topology
7 information;
8 b) providing a copy of network topology information
9 generated by, and/or network state information
10 received by, the designated routing facility to the
11 standby routing facility; and
12 c) executing, with the standby routing facility, a
13 routing protocol based on the network information
14 provided by the designated routing facility, but such
15 that signaling from the standby routing facility to
16 external nodes is suppressed
17 The ~~method of claim 1~~ wherein the act or providing a copy
18 of network topology information is effected by having the
19 designated routing facility flood such information onto a
20 local area network within the router.

1 Claim 5 (original): The method of claim 1 further
2 comprising:
3 d) if a failure of the designated routing facility is
4 determined, then electing the standby routing facility
5 as the designated routing facility.

1 Claim 6 (original): The method of claim 5 wherein the act
2 of electing includes having the standby routing facility
3 assume identification information of the failed designated
4 routing facility.

1 Claim 7 (original): The method of claim 1 wherein the
2 designated routing facility and the standby routing
3 facility share a common forwarding facility.

1 Claim 8 (currently amended) A router comprising:
2 a) a designated routing facility adapted for
3 executing a routing protocol to generate network
4 topology information; and
5 b) a standby routing facility, the standby routing
6 facility adapted for
7 i) accepting a copy of ~~network topology~~
8 ~~information generated by, and/or~~ network state
9 information received by, the designated routing
10 facility; and
11 ii) executing a routing protocol based on the
12 network information provided by the designated
13 routing facility, but such that signaling from
14 the standby routing facility to external nodes is
15 suppressed.-

Claim 9 (canceled)

1 Claim 10 (original): A machine-readable medium having
2 machine readable instructions stored thereon which, when
3 executed by a machine, effect the method of claim 1.

1 Claim 11 (currently amended): For use in a router having,
2 at a given time, a currently designated routing facility
3 and a current standby routing facility, a method
4 comprising:
5 a) informing an external node that the router has
6 redundant routing facilities;
7 b) informing an external node of the identify of the
8 currently designated routing facility;

9 c) providing, with the currently designated routing
10 facility, network information to the external node;
11 and
12 d) providing, with the current standby routing
13 facility, network information to the external node.

1 Claim 12 (currently amended): The method of claim 11
2 wherein the currently designated routing facility and
3 current standby routing facility share a common forwarding
4 facility.

1 Claim 13 (currently amended): The method of claim 11
2 wherein the act of informing an external node that the
3 router has redundant routing facilities includes generating
4 and transmitting a message including an identification of
5 the router, address information of the currently designated
6 routing facility, and address information of the current
7 standby routing facility.

1 Claim 14 (original): The method of claim 11 wherein the
2 act of informing an external node that the router has
3 redundant routing facilities uses an existing BGP message
4 format.

1 Claim 15 (currently amended): The method of claim 11
2 further comprising:
3 e) if a failure of the currently designated routing
4 facility is determined, then
5 i) electing the current standby routing facility
6 as the a new designated routing facility, and

7 ii) informing the external node of the identify
8 of the newly elected new designated routing
9 facility.

1 Claim 16 (currently amended): A router comprising:
2 a) a currently designated routing facility;
3 b) a current standby routing facility; and
4 c) a signaling facility adapted for
5 i) informing an external node that the router
6 has redundant routing facilities, and
7 ii) informing the external node of the identify
8 of the currently designated routing facility,
9 wherein the currently designated routing facility is
10 adapted to provide network information to the external
11 node, and
12 wherein the current standby routing facility is
13 adapted to provide network information to the external
14 node.

1 Claim 17 (currently amended): The router of claim 16
2 wherein the currently designated routing facility has a
3 first internet address and the current standby routing
4 facility has a second internet address.

1 Claim 18 (currently amended): A network having at least
2 two routers, each of the at least two routers comprising:
3 a) a currently designated routing facility;
4 b) a current standby routing facility; and
5 c) a signaling facility adapted for
6 i) informing an external node that the router
7 has redundant routing facilities, and

8 ii) informing the external node of the identify
9 of the currently designated routing facility,
10 wherein the currently designated routing facility is
11 adapted to provide network information to the external
12 node, and
13 wherein the current standby routing facility is
14 adapted to provide network information to the external
15 node.

1 Claim 19 (original): A machine-readable medium having
2 machine readable instructions stored thereon which, when
3 executed by a machine, effect the method of claim 11.

1 Claim 20 (currently amended): For use in a router adapted
2 to interact with an external router having, at a given
3 time, a currently designated routing facility and a current
4 standby routing facility, a method comprising:
5 a) accepting, from the external router, the identify
6 of the currently designated routing facility;
7 b) accepting, from the currently designated routing
8 facility of the external router, network information;
9 c) using the network information accepted from the
10 currently designated routing facility of the external
11 router for determining routes; and
12 d) accepting, from the current standby routing
13 facility of the external router, network information,
14 but not using it for determining routes.

1
1 Claim 21 (currently amended): The method of claim 20
2 further comprising:

3 e) storing the network information accepted from the
4 current standby routing facility of the external
5 router.

1 Claim 22 (currently amended): The method of claim 20
2 further comprising:

- 3 e) accepting, from the external router, an indication
4 that the currently designated routing facility has
5 failed;
- 6 f) accepting, from the external router, an indication
7 that the formerly current standby routing facility has
8 been elected as the a new designated routing facility;
9 and
- 10 g) using path information from the newly elected new
11 designated routing facility.

1 Claim 23 (currently amended): The method of claim 21
2 further comprising:

- 3 f) accepting, from the external router, an indication
4 that the currently designated routing facility has
5 failed;
- 6 g) accepting, from the external router, an indication
7 that the formerly current standby routing facility has
8 been elected as the a new designated routing facility;
9 and
- 10 h) using the stored path information from the
11 formerly current standby routing facility that is now
12 the newly elected new designated routing facility.

1 Claim 24 (currently amended): A router adapted to interact
2 with an external router having, at a given time a currently

3 designated routing facility and a current standby routing
4 facility, the router comprising:
5 a) an input for
6 i) accepting, from the external router, the
7 identify of the currently designated routing
8 facility, and
9 ii) accepting, from the currently designated
10 routing facility of the external router, network
11 information; and
12 b) a routing facility for
13 i) using the network information accepted from
14 the currently designated routing facility of the
15 external router for determining routes, and
16 ii) accepting, from the current standby routing
17 facility of the external router, network
18 information, but not using it for determining
19 routes.

1 Claim 25 (currently amended): The router of claim 24
2 further comprising:
3 c) a storage device for storing the network
4 information accepted from the current standby routing
5 facility of the external router.

1 Claim 26 (currently amended): The router of claim 24
2 wherein the input is further adapted for
3 iii) accepting, from the external router, an
4 indication that the currently designated routing
5 facility has failed, and
6 iv) accepting, from the external router, an
7 indication that the formerly current standby

8 routing facility has been elected as the a new
9 designated routing facility, and
10 wherein the routing facility is further adapted to use
11 path information from the newly elected new designated
12 routing facility when the input accepts the indication that
13 the formerly current standby routing facility has been
14 elected as the new designated routing facility.

1 Claim 27 (currently amended): The method of claim 25
2 wherein the input is further adapted for
3 iii) accepting, from the external router, an
4 indication that the currently designated routing
5 facility has failed, and
6 iv) accepting, from the external router, an
7 indication that the formerly current standby
8 routing facility has been elected as the a new
9 designated routing facility, and
10 wherein the routing facility is further adapted to use
11 the stored path information from the formerly current
12 standby routing facility if it is newly elected as the new
13 designated routing facility.

1 Claim 28 (original): A machine-readable medium having
2 machine readable instructions stored thereon which, when
3 executed by a machine, effect the method of claim 20.

1 Claim 29 (currently amended): The router of claim 8
2 further comprising:
3 c) means for electing the standby routing facility as
4 a new the designated routing facility if a failure of
5 the designated routing facility is determined.

1 Claim 30 (currently amended): The router of claim 16
2 further comprising:

- 3 d) means for electing the current standby routing
4 facility as the a new designated routing facility if
5 a failure of the currently designated routing
6 facility is determined; and
7 e) means for informing the external node of the
8 identify of the newly elected new designated routing
9 facility.